

Amendments to the Claims

1. (Currently Amended) A method for alarming decrease in tire air-pressure in which decrease in tire air-pressure is determined on the basis of rotational velocity information of a wheel of a vehicle and no judgment of decrease in air-pressure is performed when ((sum  $E_{sum}$  of force acting on the driving wheel tires)<sup>2</sup> = (driving force  $F_D$ )<sup>2</sup> + (turning force  $F_T$ )<sup>2</sup> > (threshold  $F_\theta$ )<sup>2</sup>) or (driving force  $F_D$  + coefficient  $a$  X lateral directional acceleration  $A_L$ ) > threshold  $F_\theta$ ) is satisfied, comprising:

obtaining wherein respective thresholds for determining whether judgment of decrease in tire air-pressure is to be made or not; and

are changed changing the respective thresholds of the above formulas depending on magnitude of driving torque of the vehicle when the vehicle is performing turning movements.

2. (Currently Amended) An apparatus for alarming decrease in tire air-pressure in which decrease in tire air-pressure is determined on the basis of rotational velocity information of a wheel of a vehicle and no judgment of decrease in air-pressure is performed when ((sum  $E_{sum}$  of force acting on the driving wheel tires)<sup>2</sup> = (driving force  $F_D$ )<sup>2</sup> + (turning force  $F_T$ )<sup>2</sup> > (threshold  $F_\theta$ )<sup>2</sup>)

or (driving force  $F_D$  + coefficient  $a$  X lateral directional acceleration  $A_L$ )  $\geq$  threshold  $F_0$ ) is satisfied, comprising:

velocity detecting means which detect wheel speeds of the respective tires,

a judging means which judges decrease in tire air-pressure on the basis of the wheel speeds detected by the velocity detecting means, and

an alarming means which issues an alarm when a decrease in tire air-pressure is judged in the judging means,

wherein the apparatus further comprises a threshold changing means which changes respective thresholds for determining whether judgment of decrease in tire air-pressure is to be made or not depending on magnitude of driving torque of the vehicle when the vehicle is performing turning movements.

3. (Original) The apparatus of Claim 2, wherein the apparatus further comprises an engine torque detecting means which detects an engine torque of the vehicle,

an engine rotational number detecting means or a shift position detecting means which detects an engine rotational number of the vehicle, and

a lateral directional acceleration detecting means which detects a lateral direction acceleration of the vehicle,

wherein a driving force applied onto tires of driving wheels is obtained on the basis of the engine torque, the engine rotational number or shift position, wheel rotational numbers as calculated from the wheel speeds detected by the velocity detecting means, and a tire radius,

wherein a turning force applied onto the tires of the driving wheels is obtained from the lateral directional acceleration, and

wherein a magnitude of force acting on the driving wheels is obtained from the driving force and the turning force.

4. (Original) The apparatus of Claim 2, wherein the apparatus further comprises an engine torque detecting means which detects an engine torque of the vehicle,

an engine rotational number detecting means or a shift position detecting means which detects an engine rotational number of the vehicle, and

a lateral directional acceleration detecting means which detects a lateral directional acceleration of the vehicle,

wherein a driving force applied onto tires of driving wheels is obtained on the basis of the engine torque, the engine rotational number or shift position, wheel rotational numbers as calculated from wheel speeds detected by the velocity detecting means, and a tire radius, and

wherein a magnitude of force acting on the driving wheels is obtained from the driving force and the lateral directional acceleration.

5. (Currently Amended) A ~~system, comprising:~~

~~a program embodied in a computer readable medium for alarming decrease in tire air-pressure wherein, for issuing an alarm of decrease in tire air-pressure of a vehicle and for not performing judgment of decrease in air-pressure when ((sum F<sub>sum</sub> of force acting on the driving wheel tires)<sup>2</sup> = (driving force F<sub>D</sub>)<sup>2</sup> + (turning force F<sub>T</sub>)<sup>2</sup> > (threshold F<sub>θ</sub>)<sup>2</sup>) or (driving force F<sub>D</sub> + coefficient a X lateral directional acceleration A<sub>L</sub> > threshold F<sub>θ</sub>) is satisfied, said program including:~~

~~a computer is made to function as a judging means which judges decrease in tire air-pressure on the basis of wheel speeds detected by velocity detecting means, and~~

~~a threshold changing means which changes respective thresholds for determining whether judgment of decrease in tire air-pressure is to be made or not depending on a magnitude of driving torque of the vehicle when the vehicle is performing turning movements; and~~

means for not performing judgment of decrease in air-pressure  
when  $((\text{sum } E_{\text{sum}} \text{ of force acting on the driving wheel tires})^2 = (\text{driving force } E_D)^2$   
 $+ (\text{turning force } E_T)^2 \geq (\text{threshold } E_\theta)^2$  or  $(\text{driving force } E_D + \text{coefficient } a \times$   
 $\text{lateral directional acceleration } A_L) \geq \text{threshold } E_\theta$  is satisfied.